AUSTRALASIA. GLOBIOCEPHALIDÆ. Globiocephalus macrorhynchus. BELUGIDÆ. Beluga Kingii. ZIPHIIDÆ. Berardius Arnuxii. New Zealand. Dioplodon seychellensis. SOUTH AMERICA. Delphinapterus Peronii. Orca magellanica. Patagonia. O. pacifica, Chili.

GLOBIOCEPHALIDÆ. Globiocephalus macrorhynchus. G. Grayii. EPIODONTIDÆ. Epiodon cryptodon. Buenos Ayres.

SOUTH AFRICA.

BALÆNIDÆ. Eubalæna australis. Cape of Good D. Moorei. Hope. Hunterius Temminckii. C. G. H. MEGAPTERIDÆ. Poescopia Lalandii. C. G. H. BALÆNOPTERIDÆ. Balænoptera Smithii. C. G. H. CATODONTIDÆ. Catodon macrocephalus. PHYSETERIDÆ. Kogia breviceps. DELPHINIDÆ. Steno capensis. Delphinus Doris. C. G. H. D. longirostris. C. G. H.

Delphinus sao. D. Moorei. D. Walkeri. Eutropia Heavisidii. C. G. H. Clymenia obscura. C. similis. Orca gladiator australis. O. capensis. Neomeris phocænoides. C. G. H.

GLOBIOCEPHALIDÆ. Globiocephalus Edwardsii.

BELUGIDÆ. Grampus Richardsonii.

EPIODONTIDÆ. Petrorhynchus capensis. P. indicus.

ZIPHIIDÆ. Dolichodon Layardii.

XXXIX.—Synonymical Notes on North-American Coleoptera. By JOHN L. LECONTE, M.D., Philadelphia.

DURING very brief visits to London and Paris in the autumn of 1869, I examined the types of many species of Coleoptera, chiefly from the United States, which were previously unknown to me, or which for various reasons could only be doubtfully referred to forms known under other names. It was my intention to make renewed studies of some of the latter, with the object of determining those that still remained uncertain; but by circumstances beyond my control I have been prevented from again visiting the collections in which the types are preserved. I have therefore thought that the interests of science would be better served by publishing without further delay the syn-

onyms of which I have no doubt, with notes which will enable some of the others to be identified, leaving those that still remain uncertain for future investigation.

The want of all books of reference prevents me from adding the bibliography of the species mentioned; but the catalogue of Harold and Gemminger will enable the student to supply this defect in these notes with but little inconvenience.

It will be observed with regret that the hastily written and very imperfect descriptions of species from British Columbia published by Mr. Walker* have in reality added nothing to our knowledge of the fauna of that region. Nearly all of his species proved on inspection to be well known to American entomologists under other names; and in several instances, as will be seen below, the irrecognizable descriptions have been made still more obscure by the reference of the species to genera quite different from those to which they really belong. This contribution to the entomology of British Columbia seems also to have been written without reference to the previously existing literature, by no means insignificant in quantity or meagre in details, in which the species found both north and south of the region in question are described. It is my privilege in these notes to restore the names given by Mr. Kirby to several not uncommon species. The progress of the science, in establishing genera upon minute differential characters, has rendered some of his very definite descriptions of somewhat doubtful application; but, reference being had to the original objects, no one will fail to recognize the fidelity with which in a few words he has presented their most prominent diagnostics. My most sincere thanks are due to Mr. C. O. Waterhouse for the kindness with which, at much sacrifice of time, he sought for me, in the vast collections of the British Museum, the specimens which I wished to see; and also to M. A. Sallé, whose friendship I had experienced on former occasions, for the valuable aid he gave me in obtaining access to the collections in Paris.

I. TYPES OF MR. KIRBY (British Museum).

1. Cicindela obliquata, Kirby, seems to be a peculiar race of vulgaris, Say (obliquata, Dej.); the markings are a little broader than usual, and the median band is dilated on the margin of the elytra. I do not think these differences specific,

* 'The Naturalist in British Columbia,' by John Keast Lord : London, 1866, vol. ii. Appendix. † Fauna Boreali-Americana, vol. iv.

as the range of *C. vulgaris* is very extensive, and it is subject to much variation. I have previously viewed this race, unknown to me in nature, as a doubtful synonym of *C. generosa*, Dej., a very different insect, which is itself a race of *C. formosa*, Say; afterwards, believing it to be distinct, I proposed for it the name of *C. Kirbyi* (Proc. Acad. Nat. Sc. Philadelphia, 1866).

2. Elaphrus Clairvillei, Kirby. According to the type, this is the species afterwards described as E. politus, Lec.

3. E. intermedius, Kirby, is not the large Kansas species, with a broad and strongly constricted prothorax, which I had determined as such, but a smaller one, of the size of E. ruscarius, Say, from which it differs by the prothoracic and mesothoracic pleuræ being more finely and densely punctured. It seems to be one of the races which, in the 'List of Coleoptera of North America,' I have grouped under E. californicus, Mann., over which name it has priority. 4. E. obscurior, Kirby. The only specimen is in very bad condition; it resembles the Alaskan E. obliteratus, Mann., but is much smaller. The elytra are very feebly and sparsely punctured, the ocellate impressions are shallow, and there are two or three polished subsutural spots*. 5. Anchomenus angusticollis, Kirby; afterwards described as Platynus stygicus, Lec. This species has no resemblance to the European P. angusticollis; and it was probably from some confusion of labels that it was so referred by Mr. Kirby. 6. Agonum seminitidum, Kirby, =A. cupreum, Dej., =A.chalceum, Lec. A common species in the Lake-Superior region.

7. A. affine, Kirby. A rather stout and convex species, probably different from any in my collection.

8. A. simile, Kirby. A small, narrow, slightly bronzed species, with the legs and antennæ black. The Alaskan A. fragile, Mann., which I saw in Baron Chaudoir's collection, closely resembles it, and probably belongs to the same species. 9. A. erythropum, Kirby. As far as can be determined from the specimen, which is in very bad condition, this is

Platynus subcordatus, Lec., a very abundant species in the regions beyond Lake Superior.

10. Argutor bicolor, Kirby. The head is wanting in the specimen; but, from the form of the prothorax and the distinct scutellar striæ, it belongs to the Argutor division of *Pterostichus*, and does not differ from *P.* patruelis (Dej.).

11. A. brevicornis, Kirby, is a small Pterostichus of the * I have seen in the same collection a specimen of E. lapponicus, labelled "Arctic America," which is quite undistinguishable from European examples.

Cryobius group. The prothorax is rather broad, narrowed behind; the sides are feebly sinuate near the basal angles; the basal impressions are single, narrow, and distant from the angles; the elytral striæ are very distinctly punctured. It seems by these characters to agree with an Alaskan form in my collection which I have received under the names C. fastidiosus, Mann., and C. frigidus, Esch. Another type of the former in my possession more nearly resembles the next.

12. A. mandibularis, Kirby, is also a Cryobius, of a distinctly bronzed colour; the prothorax is not much narrowed behind, and the sides are distinctly sinuate near the basal angles; the basal impressions are deep, and there is a very small external one at the angles. In these respects it corresponds with Feronia riparia, Dej., a common Alaskan species. The North-American species of the Cryobius group need a thorough revision: the number described has become quite large; and, so far as I can judge by the typical specimens from Alaska, which I have received by the kindness of Baron Chaudoir, Count Motschulsky, and Prof. Macklin, they are separated in some instances by almost imperceptible characters. I have obtained specimens from the summits of the White Mountains of New Hampshire, which scarcely differ from others collected in the Hudson-Bay territory and in Alaska: it is therefore probable that some of the forms have a wide distribution, and that, by comparison of series from distant localities, the limits of variation will be ascertained, and the number of opinionative

species reduced.

13. Amara discors, Kirby, =gibba, Lec.

14. A. lævipennis, Kirby, is a very distinct species of the *Celia* group, remarkable for its small size, narrow form, and highly polished surface.

15. Chlænius quadricollis, Kirby, =brevilabris, Lec.

16. C. impunctifrons, Kirby (nec Say), = pennsylvanicus, Say.

17. C. cordicollis, Kirby, is the abundant northern species formerly extensively distributed in America as C. chlorophanus, Dej., which is really a synonym of C. solitarius, Say, as has been already observed by Baron Chaudoir.

18. Harpalus laticollis, Kirby. This is not Anisodactylus nigerrimus (Dej.), as I have incorrectly placed it in the 'List of North-American Coleoptera,' but A. Harrisii, Lec., which differs from A. nigerrimus by having the sides of the prothorax feebly but distinctly flattened near the base. 19. H. basilaris, Kirby. As I indicated (Proc. Acad. Nat. Sc. Philad. 1865), this is the same as H. obesulus, Lec. It is not uncommon from Lake Winnipeg to Oregon.

20. H. ochropus, Kirby, seems to be the species afterwards described as H. fulvilabris, Mann.

21. Peryphus concolor, Kirby, is a very distinct and welldefined species; the prothorax is quadrate, slightly narrowed behind; the basal impressions are distinctly double; the elytral striæ are strongly punctured and nearly effaced towards the tip.

22. P. sordidus, Kirby, is merely an immature specimen of P. bimaculatus, Kirby.

23. Laccophilus biguttatus, Kirby, is an immature specimen of our common small species, L. proximus, Say, = americanus, Aubé. 24. Necrophorus obscurus, Kirby. This is the species, allied to N. marginatus, which I erroneously determined as N. Melsheimeri, Kirby.

25. N. Melsheimeri, Kirby, = Sayi, Laporte, = lunatus, Lec.

26. N. hebes, Kirby, is evidently one of the varieties of the species afterwards described, from Alaska, as N. maritimus, Mann.

27. N. pygmæus, Kirby, seems to be an unusually small specimen of N. defodiens, Mann. The form of the prothorax is a character of great importance in the grouping of the species of this genus, but was unfortunately not described by Mr. Kirby with sufficient minuteness to permit his species to be properly referred without inspection of the types; on the other hand, the form and size of the rhinarium, upon which, with very small series of specimens, he laid great stress, is of no specific value.

28. Cryptophagus concolor, Kirby, belongs to Triphyllus, and was afterwards described as T. ruficornis, Lec.

29. C. humeralis, Kirby, is merely a paler specimen of the same species.

30. Attagenus cylindricus, Kirby, is a very elongate species with the prothorax densely punctured; it is quite distinct from any other known to me.

31. Byrrhus concolor, Kirby, is a species of Cytilus which differs from the American form of C. varius (alternatus, Say) by the scutellum being clothed with black, instead of golden, hair.

32. B. picipes, Kirby, is the same species afterwards described as B. geminatus, Lec. B. Kirbyi, Lec., is much more robust and more obtuse behind.

33. Telephorus mandibularis, Kirby, is T. fraxini, Say. The specimen labelled by Mr. Kirby "T. ater (Linn.)" does not seem to differ.

34. T. Samouelli and T. Westwoodi, Kirby, are distinct and well-defined species, not known in other collections. 35. Leptura longiceps, Kirby, is Acmaeops strigillata (Fabr.), an abundant species in the northern parts of both continents. 36. L. longicornis, Kirby, = Acmæops marginalis, Lec. The elytra vary greatly in colour : sometimes they are yellow, with a sutural black stripe; sometimes, by the extension of the discoidal black vitta, they become almost entirely black.

II. TYPES OF MR. NEWMAN (British Museum).

37. Feronia mœrens, Newman, = Pterostichus flebilis, Lec. 1 am disposed to believe that this and P. adjunctus, Lec., are only elongate forms of what I determined as P. coracinus (Newm.). No type of the last-named could, however, be found in the boxes which were shown me.

38. F. picipes, Newman, =P. stygicus (F. stygica, Say, bisigillata, Harris).

39. F. (Pæcilus) atrata, Newman, = P. permundus (Say). This species belongs to a peculiar group of Pterostichus, which, in the 'List of North-American Coleoptera,' I have named Peristethus. It resembles P. fallax; but the posterior extremity of the prosternum is marked with a marginal line, as in Pæcilus. The P. atratus of my List is a totally distinct and, as yet, undescribed species from Winnipeg, in which the lower joints of the antennæ are strongly carinate, as in other Pæcili. 40. F. orbata, Newman, = Evarthrus conviva, Lec. The species I have distributed and described up to this time as Mr. Newman's orbata is quite distinct, and must resume the name E. sodalis, Lec., under which I have made known its most abundant form. Evarthrus fatuus, Lec., and F. corax, Lec., are also varieties of E. sodalis.

III. TYPES OF MR. WALKER (British Museum).

41. Calosoma irregulare, W. p. 312. The two specimens belong to a variety of C. tepidum, Lec., with the golden foveæ of the elytra remarkably brilliant, almost as much so as in C. calidum.

42. Callisthenes pimelioides, W. p. 312, = C. Zimmermanni, Lec. The large series of specimens in my collection shows every gradation from this very rough form to one in which the elytra are nearly smooth : they are all races of Calosoma luxatum, Say. 43. Carabus bicolor, W. p. 313, = Calosoma laqueatum, Lec. 44. Omaseus colligatus, W. p. 314, = Pterostichus (Bothriopterus) oregonus, Lec. a loss of the second second

45. Amara extensa, W. p. 314, is a short stout Harpalus. The dorsal puncture on each elytron is quite distinct. I had not time to make such a detailed examination as would enable me to identify the species.

46. A. communis, W. p. 315, = A. impuncticollis, Say.
47. Harpalus defixus, W. p. 316. I did not see the specimens of this species: it is probably H. cautus, Dej.

48. Peryphus æqualis, W. p. 316, =Bembidium planatum, Lec.

49. Laccophilus maculosus, W. p. 317, =L. decipiens, Lec.
=L. truncatus, Mann.
50. Atemeles reflexus, W. p. 317, =A. cavus, Lec.
51. Tropisternus binotatus, W. p. 318, =Hydrophilus limbatus, Lec.,—the variety with the basal margin of the elytra pale.
52. Philhydrus lividus (Forster), W. p. 319. Not examined. The mesosternum must be seen before this species can be properly identified.

53. Saprinus consimilis, W. p. 319, is S. oregonensis, Lec., and is not at all allied to S. assimilis (Payk.), but to S. lugens, Er.

54. Necrophorus conversator, W. p. 320, = N. pollinctor, Lec. My species has priority over the one described by Mannerheim under the same name, which is, moreover, a variety of N. maritimus, Mann.

55. Cremastochilus armatus, W. p. 320, = C. angularis, Lec.

56. Anomala contermina, W. p. 321, is a small species of Lachnosterna belonging to the Trichesthes group: the punctures are not very dense, but equally strong upon the prothorax and elytra; but the hairs of the former are longer; the epistoma is rounded, and the margin is very strongly reflexed. It is probably not different from L. tristis (Fabr.) = M. pilosicollis, Knoch, which is very widely distributed in North America.

57. Rhizotrogus collocatus, W. p. 321, = Phobetus testaceus, Lec.

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58. Ancylonycha nigropicea, W. p. 322, = Diplotaxis brevicollis, Lec.

59. A. consequens, W. p. 322, is a smaller species of *Diplo*taxis, more strongly punctured and with the epistoma less reflexed. I cannot identify it without reference to the series in my collection or to my monograph of the Melolonthidæ of the United States.

60. A. uninotata, W. p. 323, is a Lachnosterna of the form of L. fusca, but smaller, with the punctures of the prothorax

sparse and distinct, but not coarse. I cannot from memory name this species, if it has been previously described.
61. Serica crassata, W. p. 323, = S. anthracina, Lec.
62. Ancylochira ornata, W. p. 324, is a series of specimens of A. Langii, Mann.

63. Adelocera vetusta, W. p. 324, = A. cavicollis, Lec. 64. Athous quadrivittatus, W. p. 325, is an immature specimen of Corymbites lateralis, Lec., with pale elytra. 65. Limonius consimilis, W. p. 325. This species has been described; but I cannot name it from memory. The epistoma is subtruncate and broadly rounded; the prothorax is very shining and sparsely punctured, with the hind angles acutely carinate; the elytra are opaque, striate, with the intervals densely punctured. 66. Diacanthus semimetallicus, W. p. 325, is the western race of Corymbites æripennis (Kirby), but has the prothorax unusually dull and opaque. I have described it as C. tinctus. 67. Clerus sobrius, W. p. 326, is the ancient and well-known C. sphegeus, Fabr. 68. Iphthimus servilis, W. p. 326, is the typical form of I. serratus, Mann., with deep elytral striæ.

69. I. servator, W. p. 327, does not differ in any important respect.

70. I. subligatus, W. p. 327. A more finely striate race of the same species, approaching I. sublævis, Bland.

71. Eleodes subtuberculata, W. p. 328, is a species resembling in form E. extricata (Say); but the elytra are granulated instead of punctured. 72. E. convexicollis, W. p. 328, = E. obscura (Say), 2. 73. E. conjuncta, W. p. 329, = E. obscura (Say), 3. 74. E. binotata, W. p. 329, is of the same form as E. hispilabris (Say), sulcata, Lec.; but the elytra are only feebly striate, as in E. nupta, Lec., from New Mexico. Comparison is necessary to determine whether it is a distinct species or a race of E. hispilabris. 75. E. latiuscula, W. p. 329, resembles in form E. quadricollis, Esch., but the prothorax is slightly narrowed behind, and the elytra are not punctured, but densely granulated, and obsoletely striate. It is perhaps E. subaspera, Lec., but my remembrance of that species is not so distinct as to enable me to decide with certainty.

76. Helops inclusus, W. p. 330. I did not see the type of this species; but the description indicates that it is either H.
lautus or H. pernitens, Lec.
77. Lytta immerita, W. p. 330, is a black Epicauta, uniformly clothed with short cinereous pubescence.
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78. Nemognatha bicolor, W. p. 331, = N. apicalis, Lec., var. 79. Rhynchites congrua, W. p. 331, is a small bluish-black species, with the prothorax and elytra equally coarsely punctured; the latter are not at all striate.

80. Eutrypanus princeps, W. p. 331, is very similar to the New-Mexican Ædilis spectabilis, Lec., figured in my memoir on the Coleoptera of Kansas and New Mexico, but is perhaps different.

81. Typocerus cervinus, W. p. 332, = Toxotus spurcus, Lec.
 82. Toxotus perductor, W. p. 333, is one of the varieties of Leptura (Stenura) obliterata, Hald.

83. Clythra bisignata, W. p. 333, = Saxinis saucia, Lec.

IV. TYPES IN PARISIAN COLLECTIONS.

84. Amblychila Piccolominii, Reiche. The type in the collection of Baron Chaudoir is a slender male of A. cylindriformis, Say, with the punctures of the elytra less deep than usual, and the foveæ more numerous. I have a specimen from Fort Union, New Mexico, which resembles it in these respects.

85. Cicindela blanda, Dej., = tarsalis, Lec. The female of this species has the elytra feebly but distinctly sinuate obliquely at tip, and the outer angle of the sinuosity is quite obtuse; the base of the prothorax is slightly flattened and deeply impressed at the hind angles, somewhat as in C. lacerata, Chaud. It is therefore quite distinct from C. cuprascens and C. macra, Lec. 86. Omophron nitens, Chaud., is O. nitens, Lec., a species found in Kansas and Texas. The species from Louisiana sent to Baron Chaudoir by the late Mr. Guex, as my O. nitens, and naturally considered by him as such, is sufficiently distinct, by its narrower form, to take place as a separate species, for which, when it is fully described, another name will be required.

87. Cychrus Germari, Chaud., = C. Andrewsii, Harris.
 88. C. (Sphæroderus) granulosus, Chaud., is the race of C.
 Lecontei (Dej.) which I named C. Brevoorti.

89. C. (S.) Schaumii, Chaud., is S. nitidicollis, Chevr. This well-known species, conspicuous for its large size in the group to which it belongs, is not uncommon in Virginia and Ohio, but was first described as occurring in Newfoundland. 90. C. ventricosus, Dej. After a careful examination of all the specimens of this and the allied species in the collections of Paris, I find no correction to be made in the synonymy given by me in the brief synopsis published in the 'Transac-

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tions of the American Entomological Society,' i. 61. The synonymy of the 'List of Coleoptera of North America' is erroneous.

91. Pasimachus viridans, Lec. = P. mexicanus, Gray.
92. Pseudomorphus Pilatei, Chaud., is closely allied to, and probably identical with, P. Cronhitei, Horn; the former was collected in Yucatan, the latter in California.

93. Anisotarsus, Chaud. This genus is precisely equivalent to *Eurytrichus*, Lec., and has priority over the latter.
94. Selenophorus Beauvoisii, Dej. This species should be struck from the list of Coleoptera of North America: it is abundant in the Antilles, but does not occur in the United States.
95. Dacnochilus lætus, Lec., does not differ from D. angularis, Harold & Gemminger (Lithocharis angularis, Er.).

96. Lispinus rufescens, Lec., belongs to the genus Ancæus, Fauvel.

97. Hololepta excisa, Marseul, must be removed from the list of species of the United States: it is quite abundant in Mexico; but the only specimen labelled "Am. bor." in M. de Marseul's collection came from a source in which the localities were not accurately stated.

98. Platysoma cylindroides, Marseul. One specimen is labelled "California," on the authority of M. Boheman. As many of the localities given in the 'Eugenies Resa' by that author are erroneous, I do not think there is sufficient evidence to warrant the introduction of this species into the fauna of the United States. 99. Omalodes texanus, Marseul. The single specimen of this species does not differ appreciably from the common Mexican O. grossus. It came from the Pilate collection, and was perhaps erroneously labelled. 100. Hister cavifrons, Marseul. There is no North-American specimen of this species in M. de Marseul's collection : all are ticketed as from Mexico and "Et. Un., Venezuela." The label last mentioned gave rise to the confusion in localities by which it has been recorded as a North-American species. 101. H. californicus, Marseul. Collected by Dr. Garbiglietti in Mexico, where it is not uncommon. A single specimen has been labelled "California," but probably in error. 102. Epierus coproides, Marseul. One specimen is labelled "Am. bor., Laferté," and two from South America. Probably not found within the United States. 103. Scaptolenus femoralis, Lec. (nec Chevr.). I have seen, 26*

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in the collection of M. Sallé, that the species found in Texas and in the western part of Louisiana is quite different from the Mexican S. femoralis, with which I confounded it. The published descriptions of the two species will enable them to be easily distinguished.

104. Ectopria, Lec. This genus, which represents in North America the European Eubria, does not appear to be sufficiently distinct from the Mexican genus Dicranopselaphus, Chevr.

105. Platydema pallens, Lap. This species is found in South America, and must therefore be erased from the list of the Coleoptera of North America. I have not seen P. quadrimaculata and cyanea, Lap., nor Hoplocephala chalybea and collaris, Lap., but believe that they were wrongly attributed to North America at a time when geographical accuracy in localities was esteemed of less importance than at present. 106. Megetra cancellata (Er.). This Mexican species is quite distinct from the New-Mexican and Arizona one which I published under its name, but which, with the study of a larger series of specimens, I think is a variety of M. vittata, Lec., with irregular markings.

XL.-Note on Ælian's Wart-Hog. By P. L. SCLATER, M.A., Ph.D., F.R.S. In the 'Annals' for August last (anteà, p. 190) Dr. Gray has proposed to found a new species of wart-hog (Phacochærus Sclateri) upon an animal now living in the gardens of the Zoological Society of London. On the same page Dr. Gray had already stated his belief that this animal was " only the usual form of the female African wart-hog," i. e. the Ph. athiopicus. How the same specimen could be at once the type of a new species and the female of a well-known one, it is not easy to understand. In a second note on the same subject, in the following number of the 'Annals' (anteà, p. 263), Dr. Gray acknowledges his error in "believing" that the before-mentioned animal could be the female of Ph. athiopicus, but pays me the additional compliment of supposing that it may not be a warthog at all, and that it is possible that I do not know the difference between Sus and Phacochærus! I had hoped that the October Number of the 'Annals' would contain a further communication from Dr. Gray on the subject, in rectification of his second error; but such